

Air Guard helps test stackable cargo pallets

By 2nd Lt. Anthony Vincelli
124th Wing public affairs officer

As part of an ongoing Air Expeditionary Force Battlelab initiative, a team of Air Force personnel tested a new bi-level aircraft loading system aboard an Idaho Air National Guard C-130 at Gowen Field April 22.

The AEF Battlelab, a think tank for new and innovative ideas, made the 50-mile trip to Gowen Field to test its new system as part of an ongoing process to assess its fitness for use in the field.

The bi-level loading system works by taking existing pallets already used by the Air Force and attaching a frame and vertical rails to make a second tier. The base of the unit is designed to hold up to 6,000 pounds of equipment while the upper pallet can hold up to 3,000 pounds.

The system is very simple yet innovative because it would dramatically increase the efficiency of airlift missions such as the Air Expeditionary Force rotations into the regions of southwest asia, said MSgt. Forrest Wood, BALS project officer from the AEFB.

MSgt. Wood, a loadmaster by profession, said the beauty of the system is that it will be able to use the upper tier of cargo aircraft that was previously unused.

"This system will allow the Air Force to

fill its airlifters with more equipment, which will result in having to use fewer planes to haul the same amount of cargo," MSgt. Wood said.

These new stackable pallets are an innovation to be sure, but everyone involved with the project seems to say the same thing: why wasn't this thought of sooner? According to Mr. Norman Maynard, program manager for the design team from the Air Force Flight Test Center Instrumentation Division based at Edwards AFB, Calif. who designed and constructed the system, the idea was first theorized in the 1970s, but it was never created.

"Nobody could get it to work," Mr. Maynard said.

This latest initiative, however, does work. The battlelab has already completed an intense round of dynamic testing at Robins Air Force Base, Ga. and passed with flying colors.

"We ran this system through a number of worst-case scenarios, including crashes, uneven loading and even hanging the pallets upside-down. It seems to handle whatever we throw at it," Mr. Maynard said.

Now in the static test phase, the team is in the process of loading and unloading the system into cargo aircraft to ensure they fit into the aircraft correctly. They have completed testing on the C-141 and C-17 and their visit to Gowen Field marks the first test on the C-130. The tests on all three



Photo by Mr. James Diefenderfer

MSgt. Forrest Wood from the AEF Battlelab shows the space saving by using the bi-level airlift loading system. BALS only takes one pallet position as opposed to the two pallet positions required to floor load the same equipment.

have proven successful. They visited Gowen Field because its proximity to the battlelab. Mr. Maynard and other members of the BALS/AEF Battlelab design team say this initiative has been an exercise in teamwork among the guard, active duty and Air Force civilians.

"This entire project was conceived, designed and patented by the Air Force. It is

a totally 'blue' project," Mr. Maynard said.

If approved for use in the field, Mr. Maynard says the system will be relatively inexpensive — between \$8,000 and \$10,000 apiece.

"If all continues to go well and we get the support we need from Air Force leadership, we may see these in the field in less than a year," Mr. Maynard said.